



U.S. Army Corps
of Engineers
Buffalo District

Public Notice

Applicant: Stream +
Wetlands Foundation

Published: September 29, 2021
Expires: October 29, 2021

Application No: LRB-2020-01259
Section: OH

All written comments should reference the above Application No. and be addressed to:
US Army Corps of Engineers, Buffalo District
Regulatory Branch (Attn:) Susan L. Baker
1776 Niagara Street
Buffalo, NY 14207

THIS NOTICE ANNOUNCES A PROSPECTUS THAT HAS BEEN SUBMITTED FOR THE PROPOSED DEVELOPMENT OF A WETLAND AND STREAM UMBRELLA MITIGATION BANKING INSTRUMENT COVERING THE GRAND RIVER WATERSHED WITH AN INITIAL MITIGATION BANK SITE, REFERRED TO AS THE HEMLOCK SWAMP WETLANDS AND STREAM MITIGATION BANK, PURSUANT TO 33 CFR 332, COMPENSATORY MITIGATION FOR LOSSES OF AQUATIC RESOURCES (FEDERAL REGISTER: APRIL 10, 2008, EFFECTIVE JUNE 9, 2008). DEPARTMENT OF ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT WOULD BE REQUIRED FOR PROPOSED STREAM AND WETLAND MITIGATION ACTIVITIES THAT WOULD RESULT IN A DICHARGE OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES.

GENERAL INFORMATION

PURPOSE: The U.S. Army Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; American Indian Tribes; and other interested parties in order to consider and evaluate the proposed Grand River Watershed Umbrella Mitigation Banking Instrument and Hemlock Swamp Mitigation Bank.

COMMENT PERIOD: Comments submitted within 30 days from the date of this notice will be fully considered during the review of this proposal.

DISCLAIMER: All written comments will be made a part of the administrative record which is available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps internet web sites. A lack of response will be interpreted as meaning that there is no objection to the work as proposed. **Due to resource**

limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

CONTACT: Comments or questions pertaining to the work described in this notice should reference the Application Number and be directed to the attention of Susan L. Baker, who can be contacted at the above address, by calling (716) 879-4474, or by e-mail at: Susan.L.Baker@usace.army.mil.

BACKGROUND

The Corps has the authority to issue permits under Section 404 of the Clean Water Act for discharges of dredged or fill material into waters of the United States, including jurisdictional wetlands, and for structures or work in navigable waters under Section 10 of the Rivers and Harbors Act of 1899. Permittees may be required to provide “compensatory mitigation” for unavoidable impacts to aquatic resources.

One such option for providing compensatory mitigation is through the purchase of credits from a mitigation bank. “Mitigation bank” means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. Mitigation banks are operated by third-party sponsors that assume legal responsibility for providing the required compensatory mitigation of multiple permittees at one or more off-site locations. The operation and use of a mitigation bank are governed by a mitigation banking instrument. An umbrella mitigation banking instrument allows future authorization of additional mitigation bank sites to be incorporated by way of a mitigation banking instrument modification.

As indicated in the Corps regulations (33 CFR 332.8(b)), the district engineer will establish an Interagency Review Team (IRT) to review documentation for the establishment and management of mitigation banks. The IRT facilitates the establishment of mitigation banks through the development and review of mitigation banking instruments. The Ohio IRT consists of the following federal and state resource agencies: Corps - Buffalo, Huntington, and Pittsburgh Districts, U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), U.S. Department of Agriculture’s Natural Resources Conservation Service, Ohio Environmental Protection Agency (OEPA), and Ohio Department of Natural Resources.

Approval to use an approved mitigation bank to offset impacts associated with a specific permit is the decision of the Corps. The Corps provides no guarantee that any particular general or individual permit would be granted authorization to use an approved mitigation bank to compensate for unavoidable impacts.

PROPOSAL UNDER REVIEW

BANK SPONSOR: Stream + Wetlands Foundation, 123 South Broad Street, Suite 238
P.O. Box 369, Lancaster, OH 43130

BANK LOCATION: The 150.3-acre Hemlock Swamp Wetlands and Stream Mitigation Bank is located east of the intersection of Cork Cold Springs Road and State Route 45 in Austinburg Township, Ashtabula County, Ohio (Latitude 41.728658, Longitude -80.850536).

PROPOSAL: The Bank Sponsor has submitted a prospectus to the Corps -Buffalo District to establish a stream and wetland Umbrella Mitigation Banking Instrument (UMBI) for the Grand River Watershed (USGS 8-digit Hydrologic Unit Code 04110004) with one initial proposed mitigation bank, Hemlock Swamp Wetlands and Stream Mitigation Bank (hereafter, "HSMB").

The overall objective of the UMBI and the HSMB is to generate compensatory mitigation credits to offset unavoidable adverse impacts to wetlands and streams within the Service Area, as described below. Credits would be generated through the restoration (re-establishment and rehabilitation), establishment, enhancement and/or preservation of wetlands and streams and the restoration and/or preservation of upland buffers within the boundaries of HSMB and any future mitigation bank sites added to the UMBI.

SERVICE AREA: Service area means the geographic area within which impacts can be mitigated at a specific mitigation bank. The proposed service area is as follows:

1. For impacts to jurisdictional waters, the Service Area will encompass the entire Grand River 8-digit Hydrologic Unit Code (HUC 04110004) watershed in Ohio.
2. For non-jurisdictional stream and wetland impacts (state isolated wetland or ephemeral streams), the Service Area is as follows:
 - a. For impacts to isolated Category 1 wetlands of any size and isolated Category 2 wetlands of 0.5 acre or less, the service area includes the entire Ohio portion of the Buffalo Corps District (ORC §6111.022).
 - b. For impacts to isolated Category 2 wetlands greater than 0.5 acres, isolated Category 3 wetlands of any size, or to ephemeral streams, the service area will encompass the entire Grand River 8-digit Hydrologic Unit Code (HUC 04110004) watershed in Ohio.
3. Compensatory mitigation of wetland or stream impacts outside the Service Area can be considered by the Corps and/or Ohio EPA, as applicable, on a case-by-case basis consistent with applicable state and federal regulations and laws, including but not limited to 33 CFR §332, ORC §6111, and Ohio Administrative Code (OAC) §3745-1-54.
4. Approved mitigation credits generated by the mitigation site(s) authorized under this instrument can be purchased and used by in-lieu fee program sponsors to fulfill mitigation obligations for impacts located within the Service Area, and outside of the Service Area, on a case-by-case basis as approved by the Corps and/or Ohio EPA.

HSMB MITIGATION PLAN: The HSMB Site contains over 29.9 acres of wetlands and approximately 3,331 linear feet of streams. Approximately 58 acres of the HSMB Site has been cleared and drained for agriculture. The proposed activities and objectives of the HSMB are as follows:

- Re-establish high-quality forested and non-forested wetlands. Hydrology restoration, micro-topography restoration, and installation of native trees, shrubs, and seed mixes would take place.

- Re-establish high-quality forested uplands. The restored upland forests would be planted and seeded with native species at similar densities to the re-established wetlands, however, species would be chosen whose individual hydrology tolerances are suited to drier soil conditions with less frequent saturation or inundation.
- Rehabilitate existing degraded wetlands in the agricultural fields. Restoration activities, including tile removal, ditch plugging, micro-topography restoration, invasive species control, seeding, and planting, would restore a more dynamic and natural wetland ecosystem with a natural and balanced hydrologic regime.
- Restoration of step/pool bed morphology of on-site streams. The level of work that would be completed, along with the uplift to hydrology, biology, and water quality, from the proposed restoration activities is consistent with Mitigation Type 1, Activity Level 3, as defined in the 2016 Guidelines for Stream Mitigation Banking and In-Lieu Fee Programs in Ohio. No mitigation credit would be for the four small existing ephemeral channels.
- Preserve existing highly-quality wetlands and uplands. Preservation would be achieved by the recordation of a conservation easement.

Credits are proposed to be generated in accordance with the following tables:

Wetland Re-establishment	Ratio	Area (ac)	Credits		
			Non-forested	Forested	Total
Non-Forested wetlands	1:1	6.3	6.3		6.3
Non-Forested wetlands (setback ¹)	1:2	1.0	0.5		0.5
Forested wetlands	1:1	35.8		35.8	35.8
Forested wetlands (setback ¹)	1:2	2.8		1.4	1.4
Forested wetlands/uplands mosaic	W=1:1	9.0		9.0	9.0
	U=1:4	3.0		0.8	0.8
Forested uplands <100' from wetlands	1:4	7.5		1.9	1.9
Re-establishment Totals		65.4ac	6.8	48.9	55.7
<i>Initial Credit Release</i>		30%	2.0	14.7	16.7
Wetland Rehabilitation	Ratio	Area (ac)	Credits		
			Non-forested	Forested	Total
Rehabilitated wetlands (no credit generation)	1:4	0.7	N/A	N/A	N/A
Rehabilitation Totals		0.7ac			
<i>Initial Credit Release</i>		15%		N/A	N/A
Wetland Preservation	Ratio	Area (ac)	Credits		
			Non-forested	Forested	Total
Preserved forested wetlands	1:4	24.8		6.2	6.2
Preserved forested wetlands (setback ¹)	1:8	4.4		0.6	0.6
Preserved forested upland inclusions	1:10	46.7		4.7	4.7
Preservation Totals		75.9ac		11.5	11.5
<i>Initial Credit Release</i>		100%		11.5	11.5
		Area	Credits		
			Non-forested	Forested	Total
Wetland Project Total		142.0ac	6.8	60.4	67.2
<i>Initial Credit Release</i>			2.0	26.2	28.2

Stream Restoration Mit. Type 1, Activity Level 4	Flow Regime	Ratio	Length (LF)	Credits
Stream 1	intermittent	1.5:1	302	453
Stream 2	intermittent	1.5:1	435	653
Stream 4	intermittent	1.5:1	279	419
Stream 5	intermittent	1.5:1	386	579
Stream 7	intermittent	1.5:1	223	335
Stream 8	intermittent	1.5:1	379	569
Stream 9b	intermittent	1.5:1	857	1,286
Stream Project Totals			2,861	4,292
<i>Initial Credit Release</i>			<i>30%</i>	<i>1,288</i>

If approved, the Bank Sponsor would provide long-term protection of the HSMB through the recordation of a conservation easement. A designated third-party manager would be responsible for long-term management after bank closure. Financial assurances would be provided through a construction performance bond and a maintenance bond.

Location and details of the proposed HSMB are shown on the attached documents. The entire prospectus for the UMBI and the HSMB may be found on the Buffalo District's website along with this Public Notice: <http://www.lrb.usace.army.mil/Missions/Regulatory/Public-Notices/>

WATER QUALITY CERTIFICATION: A Section 401 Water Quality Certification may be required from the Ohio Environmental Protection Agency in conjunction with the proposed establishment of the HSMB.

HISTORIC AND CULTURAL RESOURCES: Based on a review of the Ohio Historic Preservation Office (OHPO) Geocortex Viewer (Viewer), there do not appear to be any known properties listed in, or eligible for listing in, the National Register of Historic Places within the HSMB proper. The OHPO Viewer however does indicate several known archeological resources within the vicinity of the HSMB. This notice constitutes initiation of consultation with the OHPO per Section 106 of the National Historic Preservation Act; the Corps requests OHPO's technical expertise regarding the necessity for any surveys. Should any additional information concerning historic properties or cultural resources be submitted to the Corps before the end of the comment period of this notice, the Corps will forward the submitted information to the OHPO for their review.

THREATENED & ENDANGERED SPECIES: Pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the Corps of Engineers is consulting with the USFWS to evaluate any potential impacts associated with HSMB site to: Indiana bat, northern long-eared bat, piping plover, Rufa red knot, and eastern massasauga rattlesnake, and to ensure that the proposed activity is not likely to jeopardize their continued existence or result in the destruction or adverse modification of critical habitat. The Corps has determined that the proposed activities will have no effect on piping plover and Rufa red knot, and may affect but are not likely to adversely affect Indiana bat, northern long-eared bat, and eastern massasauga rattlesnake.

REQUEST FOR PUBLIC HEARING: Any individual may request a public hearing by submitting their written request, stating the specific reasons for holding a hearing, in the same manner and time period as other comments.

Public hearings for the purposes of the Corps program will be held when the District Commander determines he can obtain additional information, not available in written comments, that will aid him in the decision-making process for this proposal. A Corps hearing is not a source of information for the general public, nor a forum for the resolution of issues or conflicting points of view (witnesses are not sworn and cross examination is prohibited). Hearings will not be held to obtain information on issues unrelated to the activities requiring approval or a permit, such as property ownership, neighbor disputes, or the behavior or actions of the public or applicant on upland property not regulated by the Department of the Army. Information obtained from a public hearing is given no greater weight than that obtained from written comments. Therefore, you should not fail to make timely written comments because a hearing might be held.

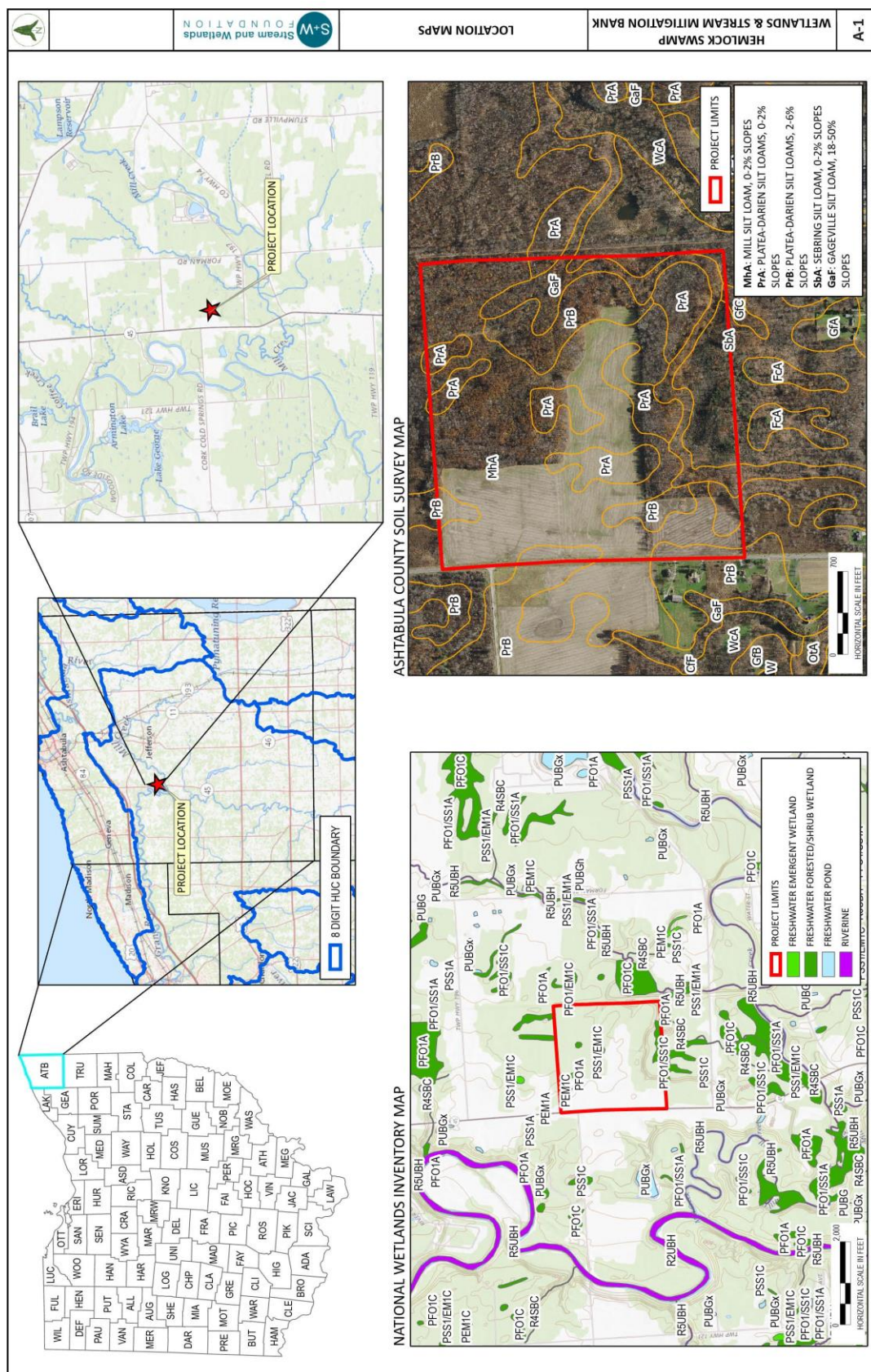
EVALUATION: The decision to approve or deny this proposal will be based on an evaluation of compliance with 33 CFR 332 (Compensatory Mitigation for Losses of Aquatic Resources, Federal Register: April 10, 2008, Effective June 9, 2008), and the probable impact, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among these are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Comments are used in the preparation of an Environmental Assessment pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

SIGNED

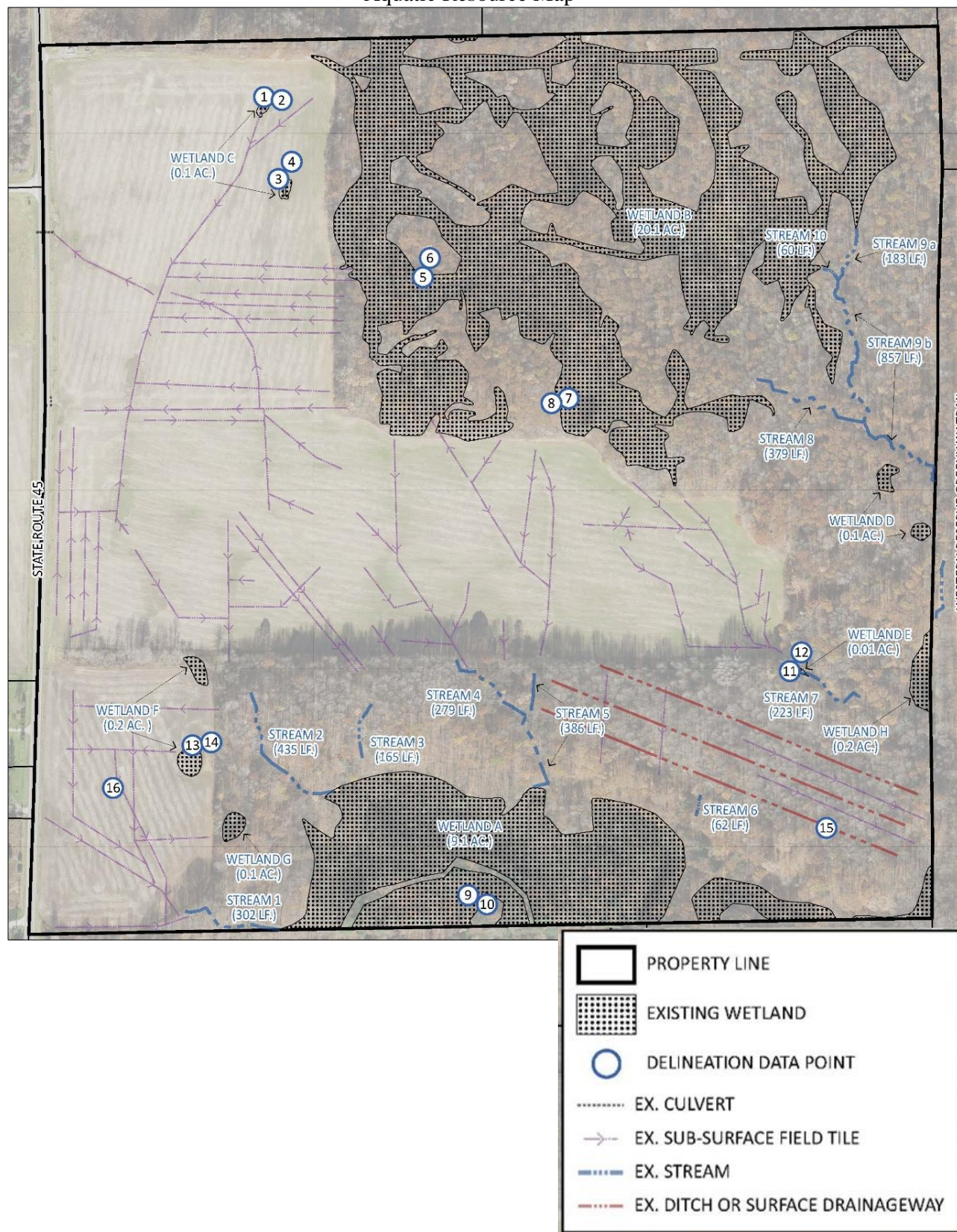
Steven V. Metivier
Chief, Regulatory Branch

NOTICE TO POSTMASTER: It is requested that this notice be posted continuously and conspicuously for 30 days from the date of issuance.

Stream + Wetlands Foundation: Grand River UMBI and Hemlock Swamp Mitigation Bank
Department of Army No: LRB-2020-01259
Quad: Jefferson, OH
Ashtabula County, Ohio

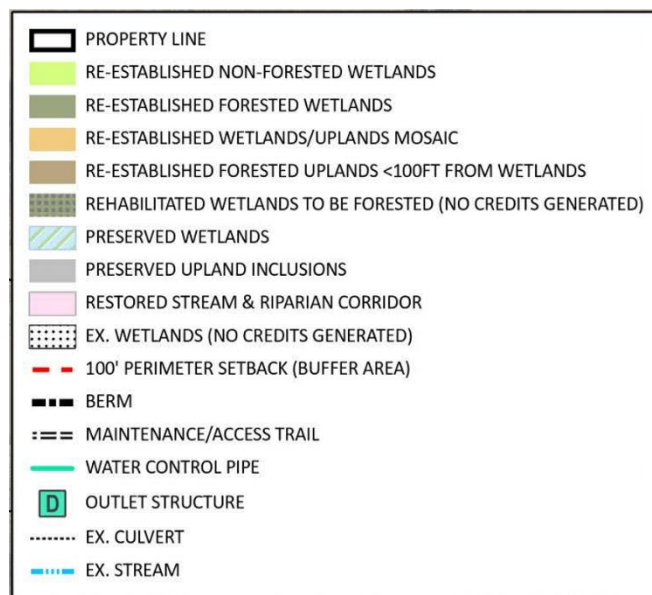
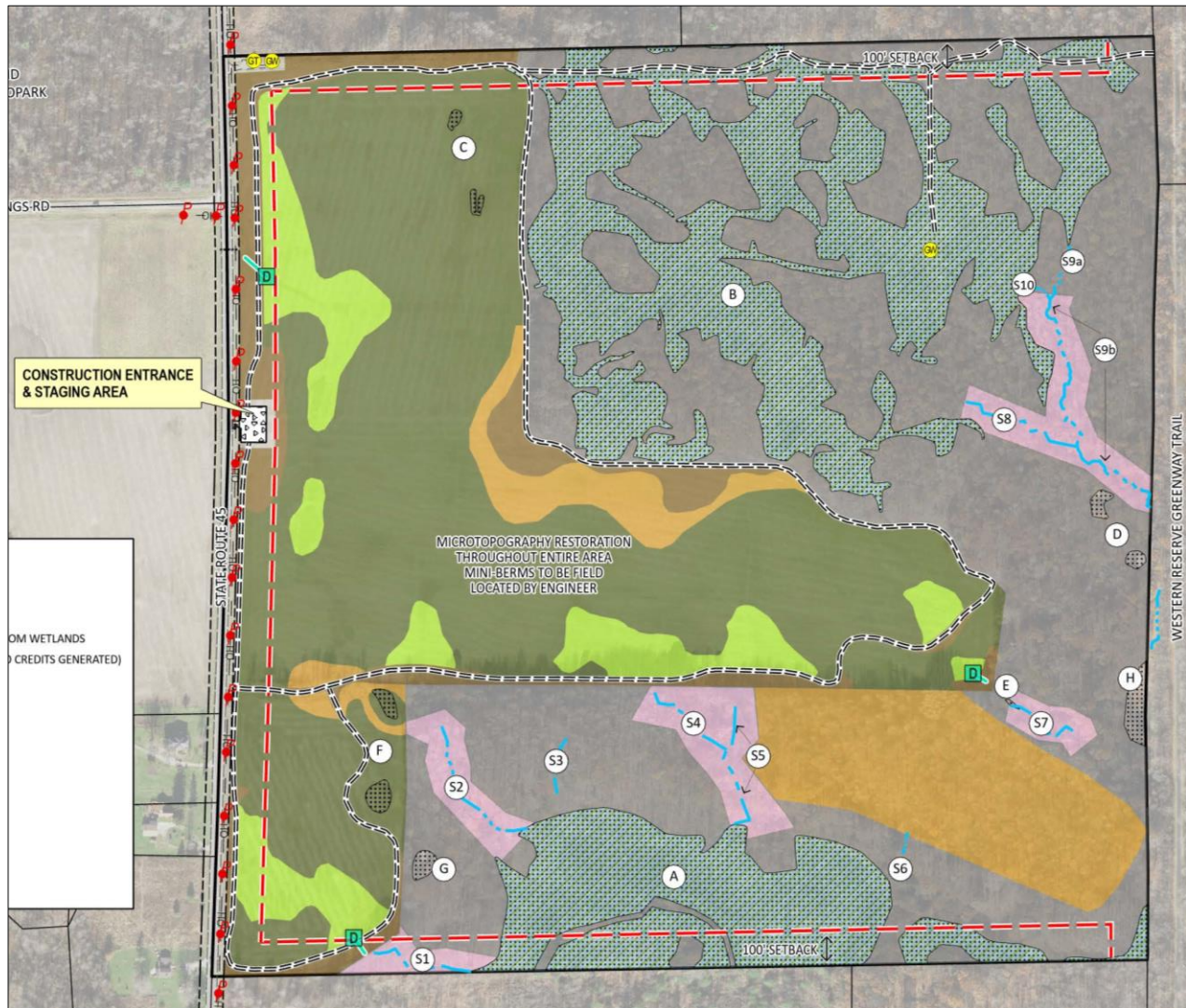


Aquatic Resource Map

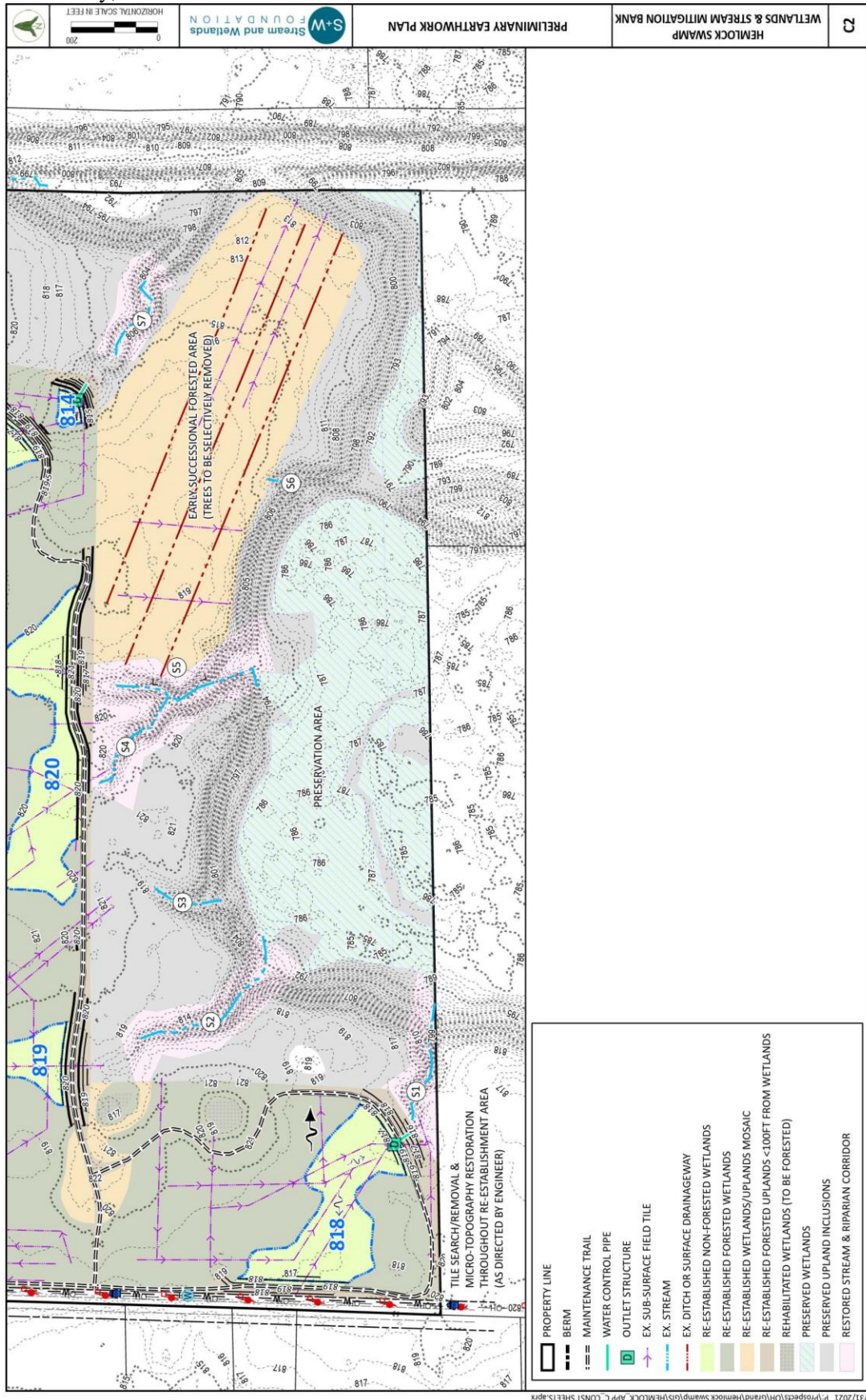


Stream + Wetlands Foundation: Grand River UMBI and Hemlock Swamp Mitigation Bank
 Department of Army No: LRB-2020-01259
 Quad: Jefferson, OH
 Ashtabula County, Ohio

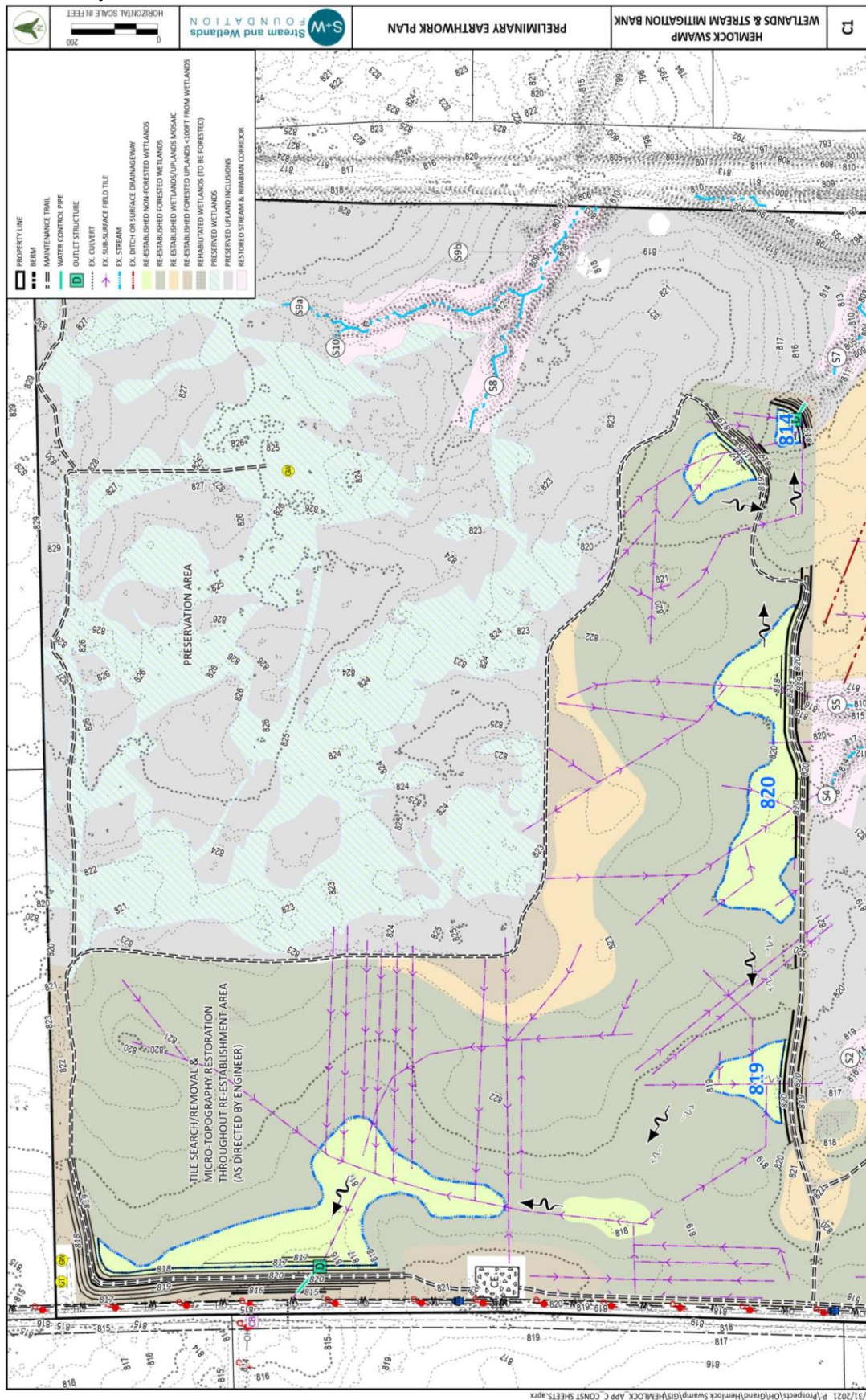
Proposed Mitigation Map



Stream + Wetlands Foundation: Grand River UMBI and Hemlock Swamp Mitigation Bank
 Department of Army No: LRB-2020-01259
 Quad: Jefferson, OH
 Ashtabula County, Ohio



Stream + Wetlands Foundation: Grand River UMBI and Hemlock Swamp Mitigation Bank
 Department of Army No: LRB-2020-01259
 Quad: Jefferson, OH
 Ashtabula County, Ohio



Stream + Wetlands Foundation: Grand River UMBI and Hemlock Swamp Mitigation Bank
 Department of Army No: LRB-2020-01259
 Quad: Jefferson, OH
 Ashtabula County, Ohio

Proposed Planting Plan

TREE AND SHRUB SPECIES LIST						
SCIENTIFIC NAME	COMMON NAME	HABIT	INDICATOR STATUS ¹	WETLANDS	UPLANDS	C OF C ²
<i>Acer rubrum</i>	red maple	tree	FAC	*	*	2
<i>Acer saccharinum</i>	silver maple	tree	FACW	*	*	3
<i>Amelanchier laevis</i>	smooth serviceberry	tree	FAC	*	*	5
<i>Aronia melanocarpa</i>	black chokeberry	shrub	FAC	*	*	5
<i>Betula alleghaniensis</i>	yellow birch	tree	FAC	*	*	7
<i>Betula populifolia</i>	gray birch	tree	FAC	*	*	5
<i>Carpinus caroliniana</i>	American hornbeam	tree	FAC	*	*	5
<i>Carya glabra</i>	pignut hickory	tree	FACU	*	*	5
<i>Carya cordiformis</i>	bitternut hickory	tree	FAC	*	*	5
<i>Carya laciniosa</i>	shellbark hickory	tree	FACW	*	*	7
<i>Carya ovata</i>	shagbark hickory	tree	FACU	*	*	7
<i>Carya tomentosa</i>	mockernut hickory	tree	UPL	*	*	6
<i>Cephalanthus occidentalis</i>	common buttonbush	shrub	OBL	*	*	6
<i>Cornus alba</i>	red asier	shrub	FACW	*	*	3
<i>Cornus amomum</i>	silky dogwood	shrub	FACW	*	*	2
<i>Cornus racemosa</i>	gray dogwood	shrub	FAC	*	*	1
<i>Fagus grandifolia</i>	American beech	tree	FACU	*	*	7
<i>Hamamelis virginiana</i>	American witch-hazel	shrub	FACU	*	*	5
<i>Ilex verticillata</i>	common winterberry	shrub	FACW	*	*	6
<i>Larix laricina</i>	Eastern larch	tree	FACW	*	*	9
<i>Lindera benzoin</i>	northern spicebush	shrub	FACW	*	*	5
<i>Liriodendron tulipifera</i>	tuliptree	tree	FACU	*	*	6
<i>Morella pensylvanica</i>	northern bayberry	shrub	FAC	*	*	10
<i>Nyssa sylvatica</i>	black tupelo	tree	FACW	*	*	7
<i>Ostrya virginiana</i>	hop-hornbeam	tree	FACU	*	*	5
<i>Platanus occidentalis</i>	American sycamore	tree	FACW	*	*	7
<i>Populus deltoides</i>	eastern cottonwood	tree	FAC	*	*	3
<i>Populus heterophylla</i>	swamp cottonwood	tree	OBL	*	*	9
<i>Quercus alba</i>	northern white oak	tree	FACU	*	*	6
<i>Quercus bicolor</i>	swamp white oak	tree	FACW	*	*	7
<i>Quercus imbricaria</i>	shingle oak	tree	FAC	*	*	5
<i>Quercus macrocarpa</i>	burr oak	tree	FACU	*	*	6
<i>Quercus palustris</i>	pin oak	tree	FACW	*	*	5
<i>Quercus rubra</i>	northern red oak	tree	FACU	*	*	6
<i>Quercus velutina</i>	black oak	tree	UPL	*	*	7
<i>Rosa palustris</i>	swamp rose	shrub	FACW	*	*	5
<i>Rosa setigera</i>	climbing prairie rose	shrub	FACU	*	*	4
<i>Salix bebbiana</i>	gray willow	shrub	FACW	*	*	5
<i>Salix discolor</i>	pussy willow	shrub	FACW	*	*	3
<i>Salix exigua</i>	sandbar willow	shrub	OBL	*	*	1
<i>Salix lucida</i>	shining willow	shrub	FACW	*	*	4
<i>Salix nigra</i>	black willow	tree	OBL	*	*	2
<i>Salix sericea</i>	silky willow	shrub	OBL	*	*	4
<i>Sambucus nigra</i> (syn. <i>canadensis</i>)	black elder	shrub	FACW	*	*	3
<i>Spiraea alba</i>	meadow-sweet	shrub	FACW	*	*	3
<i>Spiraea tomentosa</i>	steeplesbush	shrub	FACW	*	*	4
<i>Vaccinium corymbosum</i>	highbush blueberry	shrub	FACW	*	*	6
<i>Viburnum lentago</i>	nannyberry	shrub	FAC	*	*	5

¹ From Lichvar et al. 2016

² From Andreas et al. 2004

WETLAND SEED SPECIES LIST			
SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS ¹	C OF C ²
<i>Agrimonia parviflora</i>	harvestlice	FAC	2
<i>Asclepias incarnata</i>	swamp milkweed	OBL	4
<i>Bidens aristosa</i>	Midwest tickseed-sunflower	FACW	4
<i>Bidens cernua</i>	nodding burr-marigold	OBL	3
<i>Bidens connata</i>	purple-stem beggar's-tick	FACW	3
<i>Bidens frondosa</i>	devil's beggar's-ticks	FACW	2
<i>Bolboschoenus fluviatilis</i>	river bulrush	OBL	5
<i>Brasenia schreberi</i>	water shield	OBL	7
<i>Calamagrostis canadensis</i>	bluejoint	OBL	4
<i>Carex crinita</i>	fringed sedge	OBL	3
<i>Carex cristatella</i>	crested sedge	FACW	3
<i>Carex frankii</i>	Frank's sedge	OBL	2
<i>Carex hystericina</i>	porcupine sedge	OBL	5
<i>Carex lacustris</i>	hairy sedge	OBL	5
<i>Carex lupulina</i>	hop sedge	OBL	3
<i>Carex lurida</i>	shallow sedge	OBL	3
<i>Carex scoparia</i>	pointed broom sedge	FACW	3
<i>Carex stricta</i>	upright sedge	OBL	5
<i>Carex tribuloides</i>	blunt broom sedge	FACW	4
<i>Carex vulpinoidea</i>	common fox sedge	OBL	1
<i>Clematis virginiana</i>	devil's-darning-needles	FAC	3
<i>Cornus amomum</i>	silky dogwood	FACW	2
<i>Cornus racemosa</i>	gray dogwood	FAC	1
<i>Deschampsia cespitosa</i>	tufted hairgrass	FACW	10
<i>Eleocharis palustris</i>	common spikerush	OBL	5
<i>Elymus canadensis</i>	Canada wild rye	FACU	6
<i>Elymus riparius</i>	riverbank wild rye	FACW	5
<i>Elymus virginicus</i>	Virginia wild rye	FACW	3
<i>Eutrochium maculatum</i>	spotted Joe pye weed	OBL	6
<i>Eupatorium perfoliatum</i>	common boneset	FACW	3
<i>Euthamia graminifolia</i>	flat-top goldentop	FAC	2
<i>Glyceria septentrionalis</i>	floating manna grass	OBL	6
<i>Ilex verticillata</i>	common winterberry	FACW	6
<i>Iris versicolor</i>	northern blue flag	OBL	6
<i>Juncus acuminatus</i>	sharp-fruited rush	OBL	4
<i>Juncus effusus</i>	lamp rush	OBL	1
<i>Juncus torreyi</i>	Torrey's rush	FACW	3
<i>Leersia oryzoides</i>	rice cut grass	OBL	1
<i>Lindera benzoin</i>	northern spicebush	FACW	5
<i>Lobelia cardinalis</i>	cardinal-flower	FACW	5
<i>Lobelia siphilitica</i>	great blue lobelia	FACW	3
<i>Mimulus ringens</i>	Allegheny monkey-flower	OBL	4
<i>Nelumbo lutea</i>	American lotus	OBL	7
<i>Nuphar advena</i>	spatterdock	OBL	4
<i>Nymphaea odorata</i>	fragrant water-lily	OBL	6
<i>Onoclea sensibilis</i>	sensitive fern	FACW	2
<i>Panicum virgatum</i>	wand panic grass	FAC	4

2016

² From Andreas et al. 2004

WETLAND SEED SPECIES LIST			
SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS ¹	C OF C ²
<i>Peltandra virginica</i>	arrow-arum	OBL	5
<i>Penstemon digitalis</i>	foxglove beardtongue	FAC	2
<i>Penthorum sedoides</i>	ditch-stonecrop	OBL	2
<i>Pontederia cordata</i>	pickerelweed	OBL	6
<i>Sagittaria latifolia</i>	broadleaf arrowhead	OBL	1
<i>Sambucus nigra</i>	black elder	FACW	3
<i>Schoenoplectus acutus</i>	hard-stem club-rush	OBL	7
<i>Schoenoplectus tabernaemontani</i>	soft-stem club-rush	OBL	2
<i>Scirpus atrovirens</i>	dark-green bulrush	OBL	1
<i>Scirpus cyperinus</i>	cottongrass bulrush	OBL	1
<i>Scirpus polyphyllus</i>	leafy bulrush	OBL	6
<i>Solidago gigantea</i>	smooth goldenrod	FACW	3
<i>Solidago patula</i>	round-leaf goldenrod	OBL	6
<i>Sparganium americanum</i>	American burr-reed	OBL	6
<i>Sparganium eurycarpum</i>	broad-fruit burr-reed	OBL	4
<i>Spartina pectinata</i>	prairie cordgrass	FACW	5
<i>Symphotrichum novae-angliae</i>	New England American-aster	FACW	2
<i>Symphotrichum puniceum</i>	purple-stem American-aster	OBL	7
<i>Symplocarpus foetidus</i>	skunk cabbage	OBL	7
<i>Verbena hastata</i>	simples-joy	FACW	4
<i>Vernonia gigantea</i>	giant ironweed	FAC	2

¹ From Lichvar et al. 2016

² From Andreas et al. 2004